## REMARKS

Applicant has carefully reviewed the Office Action mailed November 5, 2008 and offers the following remarks to accompany the above amendments.

Claims 1, 3, 5-7, 11, 12, 14, 16-18, and 22 have been amended. No new matter has been added and no new search is required. Claims 1-22 remain pending.

Claims 1-22 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In addition, claims 3, 7, 14, and 18 were objected to under 37 C.F.R. § 1.75(c) M.P.E.P. ¶ 7.36 as allegedly being of improper dependent form in light of the rejection under 35 U.S.C. § 112, second paragraph.

Applicant has amended claims 1, 3, 5, 7, 12, 14, 16, and 18 to remove the first and second information language that was the basis of the Patent Office's rejections. In light of the amendment, Applicant respectfully submits that claims 1-22 are not indefinite and claims 3, 7, 14, and 18 are in proper dependent form. The rejections under 35 U.S.C. § 112, second paragraph, as being indefinite should be withdrawn.

Claims 1-22 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicant respectfully traverses. The Patent Office states that claims 1 and 12 recite "one or more local functions" and "one or more remote functions," and since functions, like routines, algorithms, and application programs, are usually referred to as computer software programs, the claimed programs are not statutory subject matter under 35 U.S.C. § 101 because they are not tangibly embodied in a physical medium and encoded on a computer-readable medium (Office Action mailed November 5, 2008, pp. 3-4). Applicant respectfully traverses.

Claims 1 and 12 are not directed to computer software programs. In fact, claims 1 and 12 are not directed to "one or more local functions" and/or "one or more remote functions." Claim 1 is a method of determining functions to provide at a given node forming part of a communication path comprising various steps. One of the possible steps includes sending information identifying at least one of: (1) one or more local functions capable of being provided to traffic in the communication path by the given node; and (2) if available, one or more remote functions capable of being provided to the traffic by other nodes forming part of the communication path. Another possible step includes receiving information identifying the one or more remote functions. Thus, the invention of claim 1 is directed to a method which includes

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the steps of sending from a given node information identifying one or more local functions capable of being provided to traffic in the communication path by the given node or identifying one or more remote functions capable of being provided to the traffic by other nodes forming part of the communication path, or receiving information from other nodes identifying one or more remote functions capable of being provided to the traffic by the other nodes forming part of the communication path. The invention as claimed is not the local or remote functions themselves, but the claimed steps of sending or receiving information identifying which functions are capable of being provided by which node or nodes. This claim is no different than reciting the steps of sending or receiving information regarding the identification of which computer program is to be used for a particular application, which would be patentable subject matter as well since such a claim is not claiming the computer program itself. The steps of identifying the functions in claim 1 of the present application are a properly claimed method claim. Accordingly, claim 1 does recite statutory subject matter under 35 U.S.C. § 101. The rejections under 35 U.S.C. § 101 for allegedly claiming non-statutory subject matter should be withdrawn.

Claim 12, like claim 1, is not directed to the local or remote functions themselves. Instead, claim 12 recites a communication node forming part of a communication path, where the communication node comprises a communication interface and a control system associated with the communication interface. The control system of claim 12 sends and receives the information identifying which functions are capable of being provided by which node or nodes, in a similar fashion as the method steps of claim 1. Thus, since claim 12 is directed to a communication node having a communication interface and a control system that performs the specific actions recited in claim 12, claim 12 also recites statutory subject matter under 35 U.S.C. § 101. The rejections under 35 U.S.C. § 101 for allegedly claiming non-statutory subject matter should be withdrawn.

Claims 1 and 12 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,246,879 B1 to Segura et al. (hereinafter "Segura"). Applicant respectfully traverses. For a reference to be anticipatory, the reference must disclose each and every claim element. Further, the elements of the reference must be arranged as claimed. M.P.E.P. § 2131. The requirement that each and every element be disclosed in the manner claimed is a rigorous standard that the Patent Office has not met in this case.

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Before addressing the rejections, Applicant provides a brief background. Embodiments described in the Specification of the present application provide a technique for determining which nodes are to provide various functions on traffic along a particular communication path. Generally, a communication path may include multiple nodes between which and through which traffic is routed. These nodes may include the communication terminals at either end of the communication path, as well as various types of routing nodes along the communication path. Each node will send to other nodes in the communication path information identifying the local functions it is capable of providing to the traffic carried in the communication path, and if available, remote functions capable of being provided to the traffic by other nodes in the communication path. Each node will receive from other nodes in the communication path information bearing on the remote functions. In one embodiment, the information pertaining to the remote functions is received by the most proximate upstream and downstream remote nodes. Accordingly, in this embodiment, each node in the communication path will successively receive information from an upstream or downstream node, add the local functions, and then forward a cumulative list of the downstream or upstream capabilities to the most proximate upstream or downstream nodes. As such, each node within the communication path in this embodiment can determine the various functions that are capable of being provided to the traffic in the communication path by the various nodes. Each node will then access selection criteria to determine whether any local functions should be applied to the traffic carried along the communication path.

Segura does not teach each and every element of the claimed invention. In particular, Segura does not teach that a given node in the communication path sends information identifying at least one of: one or more local functions capable of being provided to traffic in the communication path by the given node; and if available, one or more remote functions capable of being provided to the traffic by other nodes forming part of the communication path. Segura also does not teach that a given node receives information from other nodes identifying one or more remote functions capable of being provided to the traffic by the other nodes forming part of the communication path. Moreover, Segura does not disclose determining whether any of the one or more local functions should be applied to the traffic based on criteria, which defines how the one or more local and remote functions are applied by the given and other nodes and is available to the given node and other nodes.

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Instead, Segura discloses a method of sharing capabilities information between a plurality of nodes in a telecommunications network when a new node is installed in the telecommunications network or the capabilities of a node are modified. The new or modified node sends an Exchange Data Directive (EXDATADIR) Invoke message, which includes parameters relating to communications capabilities and service support capabilities of the new or modified node to one or more cooperating nodes in the network. If the node is a new node, a EXDATADIR Return Result messages, which includes parameters relating to services supported by the cooperating nodes, is sent from each cooperating node to the new node (Segura, Abstract; see also col. 1, lines 50-62). Thus, Segura at best describes that the new node and cooperating node each sends messages which include its (i.e., that node's) communication and/or service support capabilities. Segura does not teach sending or receiving information identifying one or more remote functions capable of being provided by other nodes in the communication path. That is, Segura does not disclose information identifying what functions other nodes can provide; Segura only discloses a node sending information about what capabilities that node has itself. Thus, Segura does not teach sending or receiving information identifying one or more **remote functions** capable of being provided by **other nodes** in the communication path, as recited in claims 1 and 12. Accordingly, Segura does not teach each and every element of claims 1 and 12. Therefore, claims 1 and 12 are not anticipated by Segura.

Segura also fails to disclose "determining whether any of the one or more local functions should be applied to the traffic based on criteria, which defines how the one or more local and remote functions are applied by the given and other nodes and is available to the given node and other nodes," as recited in claim 1. Claim 12 recites a similar limitation. The Patent Office alleges that Figure 2 and column 4, line 59 through column 5, line 3 of Segura discloses this limitation (Office Action mailed November 5, 2008, p. 5). Applicant respectfully disagrees.

Figure 2 of Segura is a message flow diagram illustrating the flow of messages between the own exchange 11 and a plurality of cooperating exchanges 21 and 22 when sharing information in a node capability declaration following a capabilities update of the own exchange during operation (Segura, col. 4, lines 49-53). When the capabilities of the own exchange are updated, the own exchange 11 automatically sends an EXDATADIR Invoke message 24 to the first cooperating exchange (Cooperating Exchange-1) 21 and includes the modified node capabilities in the message parameters. The own exchange 11 also sends an EXDATADIR

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Invoke message 25 to the second cooperating exchange (Cooperating Exchange-2) 22 and includes the modified node capabilities in the message parameters. At 26, Cooperating Exchange-1 updates its exchange data, and at 27, Cooperating Exchange-2 updates its exchange data with the new capabilities information. Cooperating Exchange-1 then sends an EXDATADIR return result message 28 to the own exchange with an acknowledgement of the modified capabilities. Cooperating Exchange-2 also sends an EXDATADIR return result message 29 to the own exchange with an acknowledgement of the modified capabilities (Segura, col. 4, line 53 through col. 5, line 3).

Thus, this portion of Segura merely discloses that the own exchange and the two cooperating exchanges each send a message, which includes the current communication and/or service support capabilities for itself. There is nothing in the cited portion of Segura that mentions any criteria which defines how the one or more local and remote functions are applied by the given node and other nodes, and is available to the given node and other nodes and is used in determining whether any of the one or more local functions should be applied to the traffic. Segura is silent as to how it is determined which function will be applied to the traffic from which node. In fact, the cited portion of Segura only discusses the exchange of capabilities and is silent as to applying local functions to traffic in the communication path. Thus, for the reasons set forth above, Segura fails to teach "determining whether any of the one or more local functions should be applied to the traffic based on criteria, which defines how the one or more local and remote functions are applied by the given and other nodes, and is available to the given node and other nodes," as recited by claims 1 and 12. Therefore, claims 1 and 12 are not anticipated by Segura for this additional reason.

Claims 1-10 and 12-21 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,930,264 to Nguyen (hereinafter "Nguyen"). Applicant respectfully traverses.

Nguyen, like Segura, also does not disclose each and every element of claims 1 and 12. Nguyen does not teach that a given node in the communication path sends information identifying at least one of: one or more local functions capable of being provided to traffic in the communication path by the given node; and if available, one or more remote functions capable of being provided to the traffic by other nodes forming part of the communication path. Segura also does not teach that a given node receives information from other nodes identifying one or more remote functions capable of being provided to the traffic by the other nodes forming part of

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the communication path. Moreover, Nguyen does not disclose determining whether any of the one or more local functions should be applied to the traffic based on criteria, which defines how the one or more local and remote functions are applied by the given and other nodes and is available to the given node and other nodes.

Nguyen discloses that an originating node of a communications network generates a protocol initiation message for transmission to each of its cooperating nodes in the network. This message identifies the communications protocols and capabilities supported by the originating node. The cooperating nodes generate a protocol initialization response for transmission back to the originating node which identifies the communications protocols and capabilities (industry standardized and proprietary) supported by the cooperating node (Nguyen, Abstract; see also, col. 5, lines 7-40). Nguyen at best teaches that the originating node and the cooperating nodes each send a message which include its (i.e., that node's) communications protocols and capabilities. Thus, like Segura, Nguyen does not teach sending or receiving information identifying one or more remote functions capable of being provided by other nodes in the communication path. That is, Nguyen does not disclose information identifying what functions other nodes can provide; Nguyen only discloses a node sending information about the protocols and capabilities of the node sending the message. Thus, Nguyen does not teach sending or receiving information identifying one or more **remote functions** capable of being provided by **other nodes** in the communication path, as recited in claims 1 and 12. Accordingly, Nguyen does not teach each and every element of claims 1 and 12. Therefore, claims 1 and 12 are not anticipated by Nguyen.

Nguyen also fails to disclose "determining whether any of the one or more local functions should be applied to the traffic based on criteria, which defines how the one or more local and remote functions are applied by the given and other nodes and is available to the given node and other nodes," as recited in claim 1. Claim 12 recites a similar limitation. The Patent Office alleges that columns 5 and 6, and particularly column 6, lines 28-33, of Nguyen disclose this limitation (Office Action mailed November 5, 2008, pp. 6-7). Applicant respectfully disagrees.

The cited portion of Nguyen discloses that the originating node and the cooperating nodes exchange messages about their respective protocols and capabilities. After the originating node is aware of the protocols and capabilities supported by the cooperating nodes, an agreement can be reached as to the mutually supported protocol to be used (Nguyen, col. 6, lines 28-33).

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Agreeing on a mutually supported protocol is not equivalent to the claimed criteria which defines how the one or more local and remote functions are applied by the given and other nodes and is available to the given node and other nodes, and is used in determining whether any of the one or more local functions should be applied to the traffic. Nguyen, like Segura, is silent as to how it is determined which function will be applied to the traffic from which node. In fact, the cited portion of Nguyen only discusses the exchange of capabilities and then agreeing on a mututally supported protocol. The cited portion of Nguyen does not mention applying local functions to traffic in the communication path. Thus, for the reasons set forth above, Nguyen fails to teach "determining whether any of the one or more local functions should be applied to the traffic based on criteria, which defines how the one or more local and remote functions are applied by the given and other nodes, and is available to the given node and other nodes," as recited by the claimed invention of claims 1 and 12. Therefore, claims 1 and 12 are not anticipated by Nguyen for this additional reason.

Claims 2-10 depend from claim 1 and include all of the limitations of claim 1. Claims 13-21 depend from claim 12 and include all of the limitations of claim 12. Thus, claims 2-10 and 13-21 are patentable for at least the same reasons set forth above with respect to claims 1 and 12.

Claims 11 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen. Applicant respectfully traverses. When rejecting a claim under § 103, the Patent Office must either show that the prior art references teach or suggest all limitations of the claim or explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art.[1] The gap between the prior art and the claimed invention may not be "so great as to render the [claim] nonobvious to one reasonably skilled in the art."[2] In this case, the Patent Office has failed to show where each and every limitation of the claims is taught or suggested by the prior art. Further, for those limitations of the claims that are not taught or suggested by the prior art, the Patent Office has failed to explain why those limitations would have been obvious to one of ordinary skill in the art.

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[1] Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*, published in the Federal Register, Vol. 72, No. 195, pages 57526-57535.

[2] *Dann v. Johnston*, 425 U.S. 219, 230, 189 U.S.P.Q.(BNA) 257, 261 (1976).

Claim 11 depends from claim 1 and includes all of the limitations of claim 1. Claim 22 depends from claim 12 and includes all of the limitations of claim 12. Thus, claims 11 and 22 are patentable for at least the same reasons set forth above with respect to claims 1 and 12.

Moreover, the Patent Office alleges that it would be obvious to one of ordinary skill in the art that the node that shows the most cooperating characteristic by its attributes, e.g., matching protocol, same data rate, closest in the path, etc., is the one that will have priority (Office Action mailed November 5, 2008, p. 9). Applicant respectfully submits that the Patent Office is improperly reading claims 11 and 22 and that claims 11 and 22 do not recite what the Patent Office alleges would be obvious. Claims 11 and 22 do not recite picking a node for priority purposes based on whether it has the most cooperating characteristic. Claims 11 and 22 recite wherein certain of the one or more local functions and certain of the one or more remote functions are identical, the criteria defining selection indicia determining which of the one or more local and remote nodes is given priority. That is, according to claims 11 and 22, when a certain function that is capable of being provided by a given node (i.e., a local function) is the same function that is also capable of being provided by another node (i.e., a remote function), then the selection indicia in the claimed criteria are used to determine which node or nodes among the local and remote nodes will be given priority in actually applying the function. Nguyen does not teach or suggest this feature of claims 11 and 22. Thus, claims 11 and 22 are patentable for this additional reason.

The present application is now in condition for allowance and such action is respectfully requested. The Examiner is encouraged to contact Applicant's representative regarding any remaining issues in an effort to expedite allowance and issuance of the present application.

Respectfully submitted,

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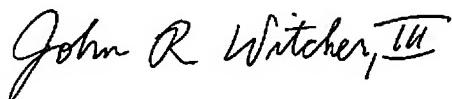
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